

**Cuts.** All tree stumps, boulders and other obstructions shall be removed to a depth of two (2) feet, or greater if required by the county engineer, to reach a firm substratum below sub-grade. Rock, when encountered, shall be removed to the sub-grade; all topsoil shall be removed except where deemed not feasible by the planning commission. This provision applies to the roadway width, not necessarily to the entire right-of-way width. The finished cut shall meet a compaction rate of **98** percent Standard Proctor.

**Fill.** All suitable material from roadway cuts may be used in the construction of fills, approaches or at other places as needed. Unsuitable materials, including organic materials, soft clays, etc., shall be removed from the roadway. The fill shall be spread in layers not to exceed eight (8) inches loose and compacted by a sheep's foot roller. The filling of utility trenches and other places, not accessible to a roller, shall be mechanically tamped. All fill must meet a compaction rate of **98** percent Standard Proctor.

Any trench cut across an existing or proposed roadbed right-of-way shall be backfilled with gravel in any area that will be under the pavement section and shall extend two (2) feet outside the edge of the base width and then thoroughly tamped. All utilities placed in the right-of-way shall be back-filled with rock level with the adjacent sub-grade.

**Base:** Mineral aggregate type "A", Grading "D" crushed stone base material shall be uniformly placed across the entire satisfactorily prepared road bed and roadway shoulders, if present, to a final compaction depth of not less than five (5) inches vertical. Developer/contractor shall furnish the source and Standard Proctor for the material used. All base material shall meet a compaction rate of 95 percent Standard Proctor and plus or minus two (2) percent on the optimum moisture content as determined by a certified testing laboratory. All testing must be completed with passing results before the binder course is placed.

**Binder Course:** After the crushed stone base material is fully set and bonded, bituminous material for prime coat shall be applied to the entire roadbed at a uniform rate of between 0.30 and 0.35 gallons per square yard horizontal measure. Bituminous plant mix base (Hot mix binder) Grading "B" mixture shall then be uniformly placed and compacted across the entire roadbed to a depth of not less than two (2) inches and a minimum density of two hundred and seventy-five (220) pounds per square yard. Developer/contractor shall furnish a copy of the mix design to be used prior to placement of the binder course. All testing must be completed with passing results before the surface course is placed.

**Surface:** Compact asphaltic concrete surface course (hot mix surfacing (Grade E), mixture shall then be uniformly placed and compacted across the entire roadbed to a depth not less than one (1) inches with a minimum density of 110 pounds per square yard. Developer/contractor shall furnish a copy of the mix design to be used prior to placement of the surface course.

Core drillings shall be made for hot-mix roads by the County Engineer's Office after hot-mix application, and they shall be inspected against acceptable standards. Where the sample does not meet minimum standards, the developer shall also pay for all additional compaction tests or other lab tests to determine the pavement's character and strength. The average of all cores must have a compaction of at least ninety-two (92) percent with no core below ninety (90) percent compaction. The thickness of the core will also be measured.

**Commercial:** Construct as per requirements in Section 6.06 C., with the following exceptions:

1. Base: Eight (8") inches compacted mineral aggregate type "A, Grading "D" crushed stone base
2. Binder: Two and one-half (2 ½) inches compacted, hot mix binder, Grading "B" with a minimum density of 220 pounds per square yard.
3. Surface: One and one-half (1 ½) inches compacted hot-mix asphaltic concrete Type E with a minimum density of 165 Pounds per square yard.

**Industrial or Heavy Commercial:** Construct as per requirements in Section 6.06 C., with the following exceptions:

1. Base: Eight (8") inches compacted mineral aggregate type "A, Grading "D" crushed stone base
2. Binder: Three and one-half (3 ½ ) inches compacted, hot mix binder, Grading "B" with a minimum density of 385 pounds per square yard.
3. Surface: One and one-half (1 ½) inches compacted hot-mix asphaltic concrete Type E with a minimum density of 165 pounds per square yard.